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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,128	11/18/2003	Andreas Gerken	GERKEN ET AL.-I	7013
25889	7590	09/25/2006	EXAMINER	
WILLIAM COLLARD COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			MUSSEY, BARBARA J	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/716,128

Applicant(s)

GERKEN ET AL.

Examiner

Barbara J. Musser

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3 and 5-38 is/are pending in the application.
- 4a) Of the above claim(s) 5,6 and 14-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 7-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/17/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 8, it is unclear how the same tool top part can delimit the shape of the foam and of the skin since the foam is behind the skin and the layers are therefore of difference sizes. For the purposes of examination, this is considered to require two different tool top parts, one of which delimits the space of the skin and another one of which delimits the shape of the foam. It is noted this rejection was not previously included since applicant's claim appeared to suggest that delimit was read so broadly that the tool top mold could have layers on it such that the material did not directly contact the tool top mold.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1, 7, 10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ericson(U.S. Patent 3,259,673) in view of Malfliet et al. and DeMoe et al.(WO 01/26883A1)

Ericson discloses a method of forming a molded article by spraying a film coating into a mold, hardening it to form a film, closing the mold, back foaming the mold with the foam dimensions defined by the film and the top of the mold under heat, and removing the article from the mold.(Figures 1-4; Col. 6, ll. 35-50; Col. 7, ll. 50-60; Col. 8, ll. 71-75; Col. 9, ll. 7-9) Since the foam is a urethane foam mixture, it is considered to contain reactive foaming ingredients.(Col. 9, ll. 43-45) The reference does not disclose inserting an elastic skin having a graining on the inside and applying the film to it, and after removal from the mold, stripping the elastic skin away. Malfliet et al. discloses a method of forming a molded body by inserting an elastic skin(6) having a graining(7) on the inside into a receiving mold bottom(2,3,4), the edges of which stabilize the elastic skin(Figure 1), applying a liquid polymer to the inside of the elastic skin which is hardened to form a molded skin(9), back foaming the mold by introducing a foamable mixture into the mold, removing the elastic skin(6), molded skin(9), and foamed body(12) from the mold as a unit attached to the tool top(Figure 11), and stripping the elastic skin from the molded skin so that graining remains on the molded skin.(Figure 7; Abstract; Pg. 4, ll. 2-4; Pg. 6, ll. 12-13, 26-Pg. 7, ll. 1, 8-11; Pg. 10, ll. 13-20) This process prevents the mold seams from being present on the final article.(Pg. 2, ll. 24-Pg. 3, ll. 2) It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an elastic skin with a grain pattern rather than give the film

the pattern of the mold surface since this would prevent the mold seams from being present in the final product. (Pg. 2, ll. 24- Pg. 3, ll. 2)

The reference does not disclose the mold top part having a channel for heating, but rather places the entire mold in an oven.(Col. 8, ll. 74-75) DeMoe et al. discloses a method of applying a cover to a foamable mixture in a mold wherein the mold is heated via heat lines extending through the top and bottom of the mold.(Pg. 2, ll. 1-2; Abstract) It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the mold of Ericson and Malfliet et al. using channels in the top and bottom of the mold since DeMoe et al. shows this is a known alternative in the art to using an oven(Pg. 2, ll. 1-2) and since this would reduce the amount of equipment and the amount of moving of the mold required.

Regarding claim 7, Malfliet et al. discloses re-using the elastic skin, by removing it from the article and positioning it again in the mold.(Pg. 4, ll. 2-4)

Regarding claim 10, Ericson discloses the film can be polyvinyl chloride.(Col. 3, ll. 44-45)

Regarding claim 12, Malfliet et al. discloses a paint film can be applied to the inside of the elastic skin after it is placed in the mold.(Pg. 8, ll. 1-3)

Regarding claim 13, while Malfliet et al. does not disclose that different part of the elastic skin can be painted different colors, one in the art would appreciate that different regions could be painted different colors so the final article would have different colors in different locations.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ericson, Malfliet et al., and DeMoe et al. as applied to claim 1 above, and further in view of Jourquin et al.(U.S. Patent 5,662,996).

The references cited above do not disclose whether the foam is open or closed cell, but does indicate the foam is made of polyurethane and the article can be used as an instrument panel or trim component.(Col. 7, ll. 13-15) Jourquin et al. discloses forming a dashboard or trim component having a skin and a polyurethane foam in a mold wherein the foam is an open-cell foam.(Abstract; Col. 1, ll. 8-10; Col. 4, ll. 22-23) It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the foam of Ericson, Malfliet et al., and DeMoe et al. open cell since Jourquin et al. shows that articles made of similar materials in similar ways for similar end uses use an open cell foam.(Col. 4, ll. 22-23)

6. Claims 1, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene(U.S. Patent 5,938,993) in view of Malfliet et al., Ericson, and DeMoe et al.(WO 01/26883A1)

Greene discloses a method of forming a molded article by forming a silicone skin in a mold having the texture of the final described product, injecting a skin coating onto the silicone, hardening it to form a film, pouring foamable material into the mold, closing the mold, and back foaming the mold with the foam dimensions defined by the film and the top of the mold under heat.(Figures 3A-6B; Col. 7, ll. 52-57; Col. 8, ll. 11-24) Since the foam is a urethane foam mixture, it is considered to contain reactive foaming ingredients.(Col. 8, ll. 17-18) While the reference does not disclose the silicone layer as

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elastic, one in the art would appreciate that silicone materials are generally elastic. The reference does not disclose inserting the silicone skin into the mold, or how the article is removed from the mold. Malfliet et al. discloses a method of forming a molded body by inserting an elastic skin(6) having a graining(7) on the inside into a receiving mold bottom(2,3,4), the edges of which stabilize the elastic skin(Figure 1), applying a liquid polymer to the inside of the elastic skin which is hardened to form a molded skin(9), back foaming the mold by introducing a foamable mixture into the mold, removing the elastic skin(6), molded skin(9), and foamed body(12) from the mold as a unit attached to the tool top(Figure 11), and stripping the elastic skin from the molded skin so that graining remains on the molded skin.(Figure 7; Abstract; Pg. 4, ll. 2-4; Pg. 6, ll. 12-13, 26-Pg. 7, ll. 1, 8-11; Pg. 10, ll. 13-20) It would have been obvious to one of ordinary skill in the art at the time the invention was made to inserting the silicone skin and remove it together with the skin coating and foamed mixture since this would allow reuse of the mold, since the shape of the article would make it difficult to remove without destroying the mold or also removing the silicone layer, and since Malfliet et al. discloses this is a known method of using molds with textured skins. (Figure 7; Abstract; Pg. 6, ll. 12-13, 26-Pg. 7, ll. 1, 8-11; Pg. 10, ll. 13-20)

The references cited above do not disclose closing the mold prior to inserting the foamable material. Ericson discloses closing a mold having a skin layer therein before injecting the foamable materials.(Figure 3) It would have been obvious to one of ordinary skill in the art at the time the invention was made to inject the foam after closing the mold as shown for example by Ericson(Figure 3) since this is a known

alternative to closing the mold after injecting the foam and since this would insure the foam did not temporarily expand larger than the desired final shape, possibly causing problems when the reacting foam was re-compressed into the mold.

The references cited above do not disclose the mold top part having a channel for heating or any heating. DeMoe et al. discloses a method of applying a cover to a foamable mixture in a mold wherein the mold is heated via heat lines extending through the top and bottom of the mold.(Pg. 2, ll. 1-2; Abstract) It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the mold of Greene and Malfliet et al. using channels in the top and bottom of the mold since DeMoe et al. shows this is a known method in the art to heat a foamable mixture(Pg. 2, ll. 1-2) and since this would insure the foamable mixture heated and cured adequately.

Regarding claim 8, while Greene discloses the skin layer can be sprayed on, this is clearly only exemplary and other methods such as that of Malfliet et al., which discloses injecting or pouring the molded skin resin(Pg. 6, ll. 25-28). The mold space when the mold is closed is defined by the elastic skin(6) and the top tool part(12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to pour or inject the skin layer of Greene using a tool top part to delimit the shape of the skin layer since Malfliet et al. discloses this is a known alternative in the art for applying the skin layer to the interior of a mold.(Pg. 6, ll. 25-28)

Regarding claim 9, while Greene discloses the skin layer is dried, it does not disclose heating via a channel in the tool top part. However, the combination of Greene, Malfliet et al., and DeMoe et al. does contain a channel in the tool top part used



for molding the foam. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a channel in the tool top part used to form the skin and to heat the skin using this channel since DeMoe et al. shows it is known to use channels to heat a mold and since this would dry the skin layer quickly.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Greene, Malfliet et al. and DeMoe et al. as applied to claim 1 above, and further in view of Staneluis et al.(U.S. Patent 4,925,719).

Greene discloses the skin layer is polyurethane(Abstract) but does not disclose it is a curable polyurethane. Staneluis et al. discloses a method of making a polymeric article with a polyurethane skin and a polyurethane foamed core in a mold(130,132) wherein the skin layer is a thermoset polyurethane(Col. 1, ll. 12-15; Col. 2, ll. 25-26; Col. 7, ll. 8-10) It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the molded skin of Greene thermosetting since Staneluis et al. discloses that articles made with polyurethane skins and polyurethane foams cores in molds can have thermosetting skins.(Col. 1, ll. 12-15; Col. 2, ll. 25-26) Since the polymer can only be either single or multi component and either based on aliphatic or aromatic starters as there are no other alternatives, the reference is effectively considered to teach these limitations.

### ***Response to Arguments***

8. Applicant's arguments filed 6/21/06 have been fully considered but they are not persuasive.

Regarding applicant's argument that Malfliet et al. does not disclose a heated channel in the tool top part, DeMoe et al. does.

Regarding applicant's argument that Malfliet et al. discloses a support on the tool top part, and the foam is intended to directly contact the tool top part, both Ericson and Green show the foam contacting the tool top part.

9. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that it is necessary for individual mold sections to be removed first) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally, the claim language is open, and the claims are not written such that this step cannot be present.

Regarding applicant's argument that the foam is inserted into the mold of Malfliet et al. prior to closing of the mold, Ericson shows inserting the foam into the intermediate space after closing of the mold.(Figure 2)

Regarding applicant's argument that Malfliet et al. does not disclose hardening the skin, Ericson discloses it is fused.(Col. 1, ll. 18-20) Greene discloses the skin is dried(Col. 8, ll. 17) which would form a hardened layer.

Regarding applicant's argument that one in the art would not think to re-use the skin of Malfliet et al., the reference specifically states the skin(liner) can be removed from one article and positioned again in the mold, indicating it is re-used.(Pg. 4, ll. 2-4)

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

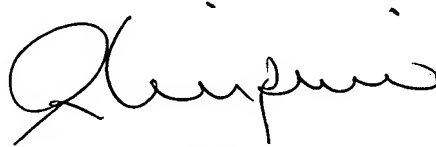
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara J. Musser whose telephone number is (571) 272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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